



Georgia Department of Transportation

January 16, 2013

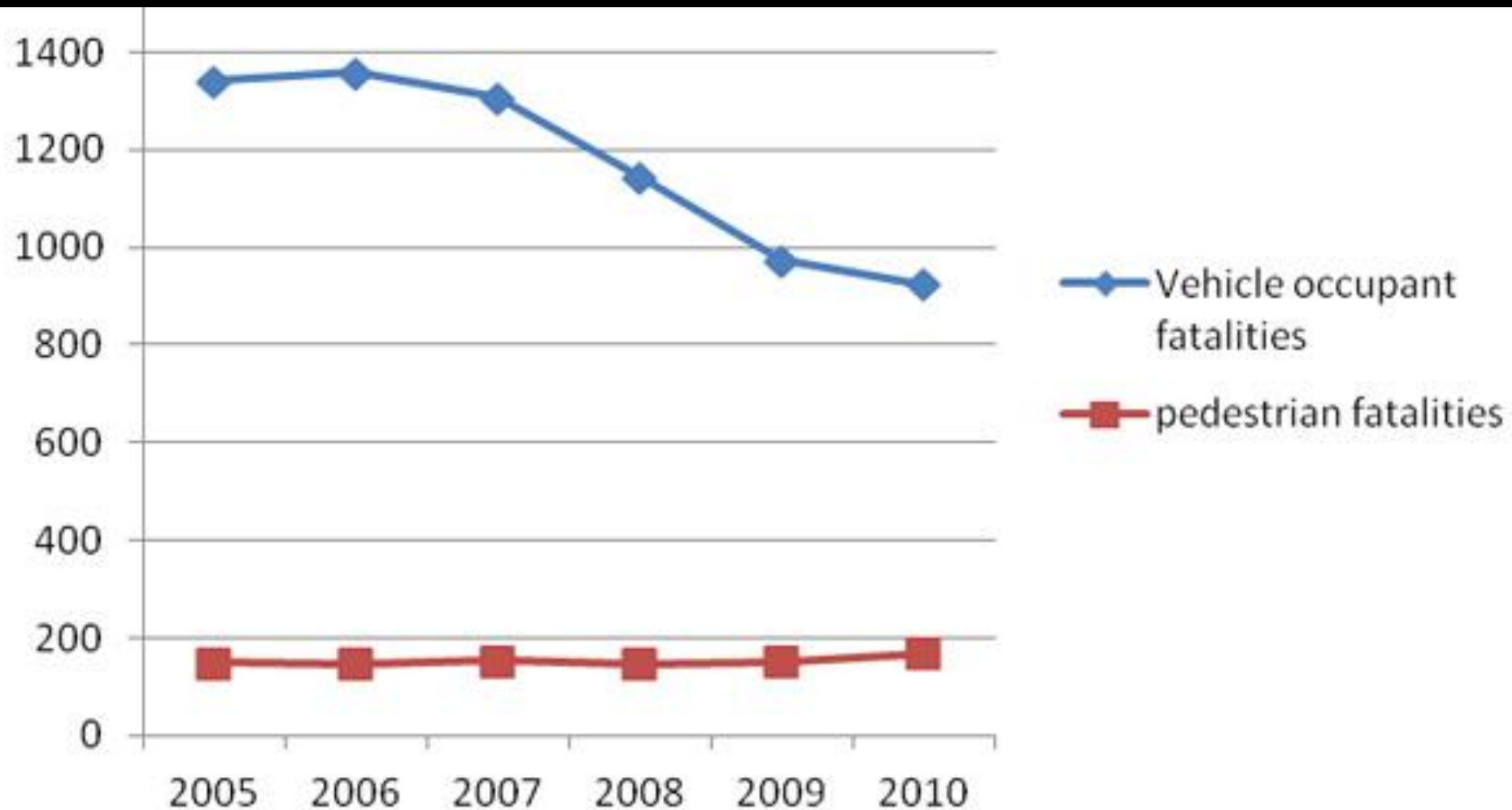


U.S. Department of Transportation
Federal Highway Administration



KAISER PERMANENTE®

Pedestrians make up an increasing share of Georgia's traffic fatalities.

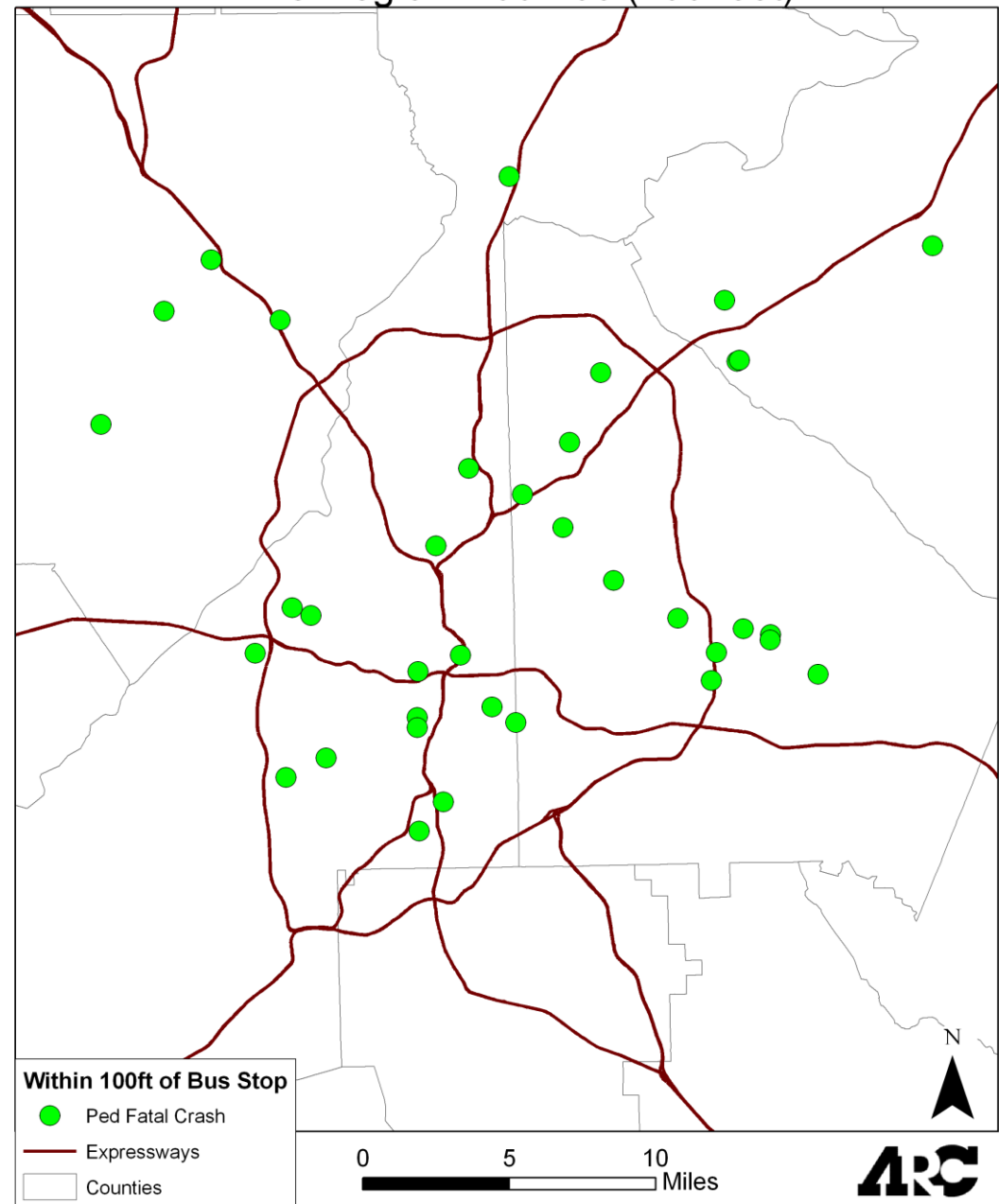


Pedestrians account for 1 out of 7 traffic fatalities in Georgia.

Pedestrian Fatal Crashes Near Bus Stops
ARC Region: 2004-08 (100 feet)

Pedestrian Fatal Crashes

- The pedestrian fatalities are occurring further out in areas with less pedestrian infrastructure.
- Arterials designed for vehicles

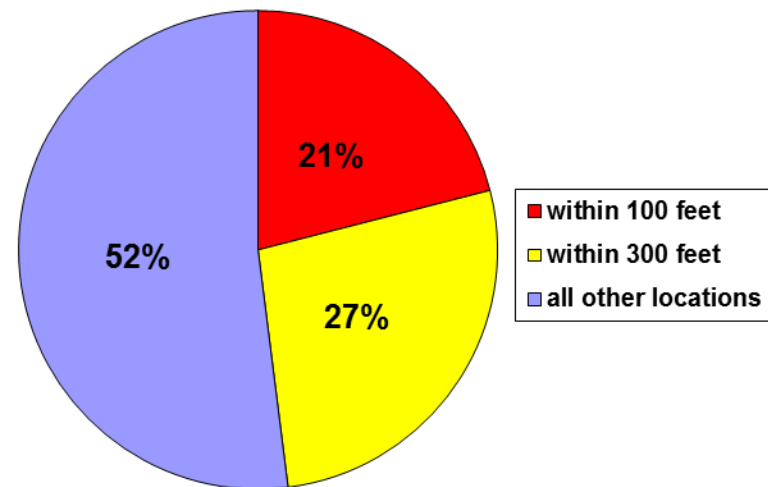




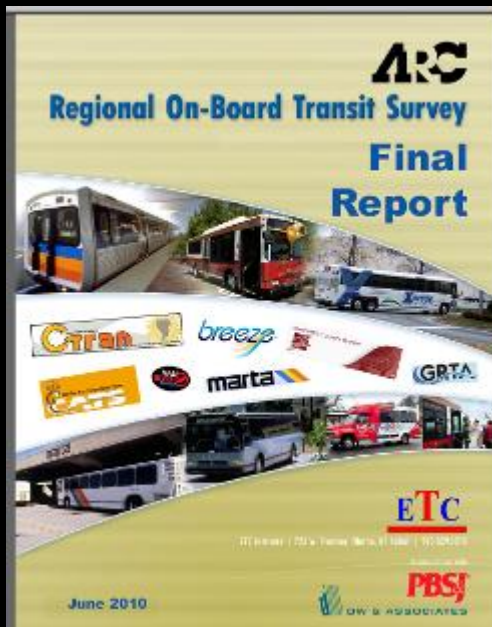
**In the 18-county metro
Atlanta region, 21% of
pedestrian crashes
occurred within
100 feet of a bus stop**

Data provided by Talya Trudell, ARC

**Pedestrian Crashes Near Bus Stops
(2005 - 2008)**



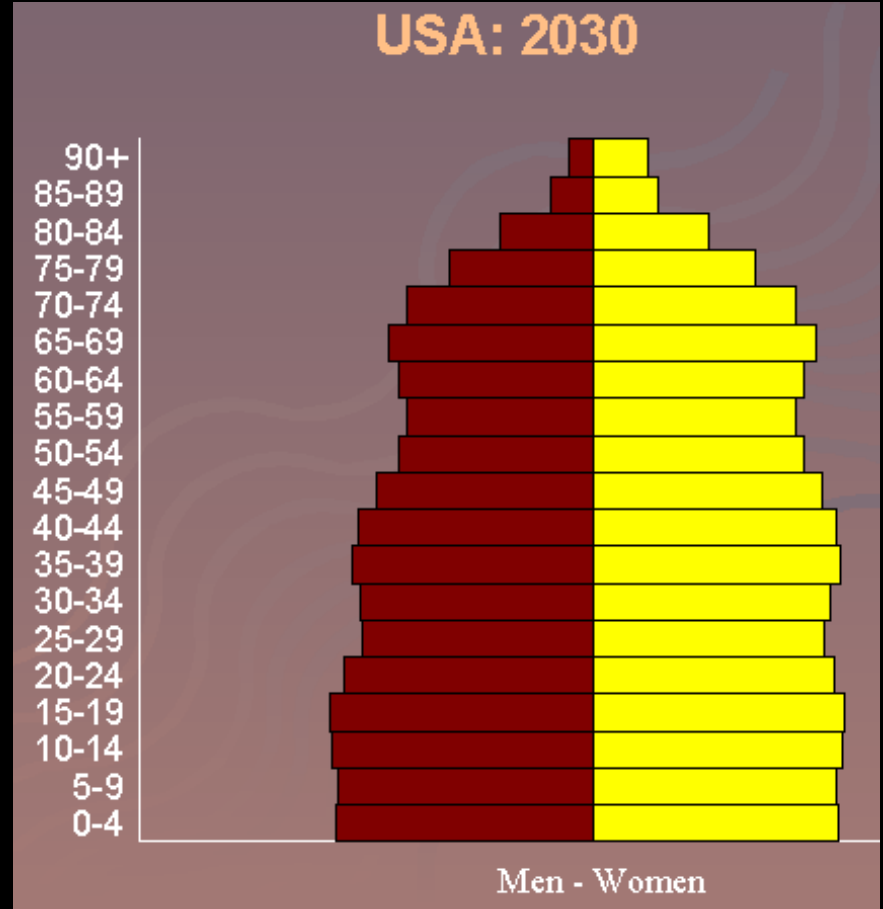
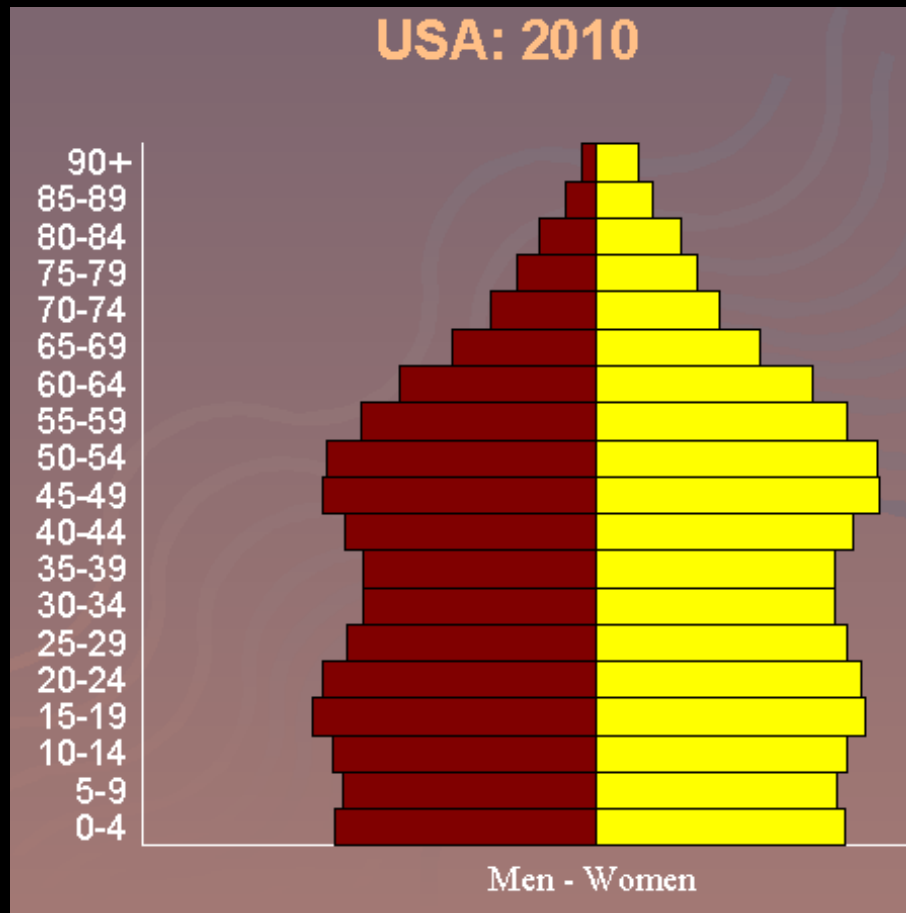
Three out four walk to transit.



Mode of Access to Transit	Percent
Walked	72.4%
Dropped Off	14.0%
Drove Alone	10.6%
Rode in a vehicle for part of the trip and walked/biked rest of the way	1.8%
Carpooled/Vanpooled	0.9%
Bicycle	0.3%

Longer lives

Slower walking speeds



Source: ageworks.com

Poverty Moves To The Suburbs (MAPS)

Recommend

112 people recommend this. Be the first of your friends.



101

23

1

24

233

GET BUSINESS ALERTS:

Enter email

SIGN UP



share



tweet



email



comment

REACT:

Inspiring

Greedy

Typical

Scary

Outrageous

Amazing

Innovative

Infuriating

FOLLOW: [Foreclosure Crisis](#), [Poverty](#), [Great Recession](#), [US Poverty](#), [Breakdown](#), [Data](#), [Maps](#), [Poverty Rate](#), [Suburban Poverty](#), [Business News](#)

1

2

3

NEXT

The number of people living in poverty in the suburbs of major metropolitan areas increased by 53 percent between 2000 and 2010, as compared to an increase of 23 percent among city residents.

Suburban areas with the biggest increase in people in poverty, 2000-2010

Atlanta	367,038
Chicago	277,549
Houston	235,056
Dallas	231,896
Miami	212,981
Detroit	202,551
Riverside, Calif.	193,994
New York	160,855
Tampa, Fla.	129,324
Phoenix	122,562
Orlando, Fla.	121,833
Seattle	115,194
Washington	110,777
Las Vegas	109,412
Minneapolis	107,715
Los Angeles	102,133
St. Louis	100,678
Cincinnati	88,041
Kansas City, Mo.	81,831
Philadelphia, Pa.	81,676

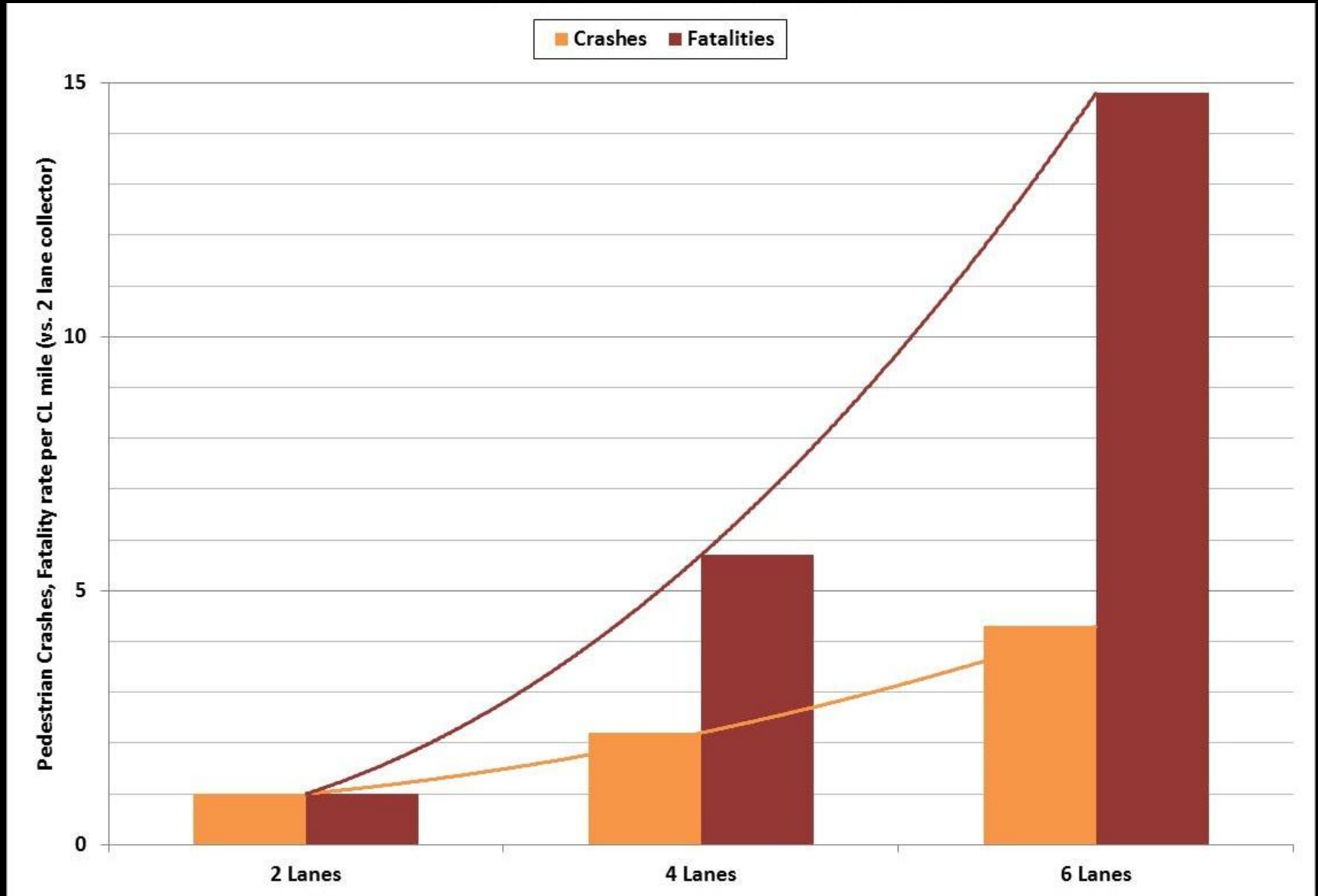




Speed matters.

More than 80 percent of pedestrians die when hit by vehicles traveling at 40 mph or faster.

Wide roads have higher pedestrian crash rates.



Orlando, FL

Bus Stop



**People want and need
to cross the street safely.**



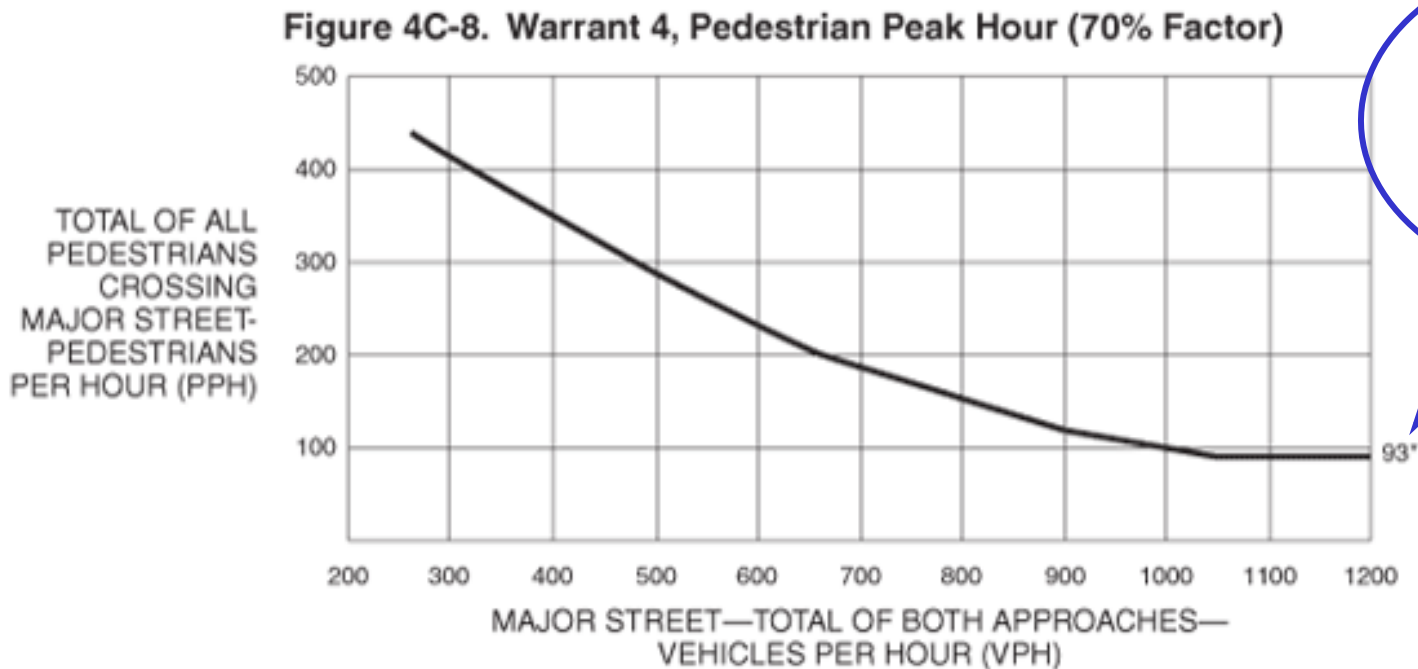
**Ideally, we'd always cross at locations
with positive control.**



But the reality is quite different.

MUTCD Traffic Signal Warrants

2009 Edition Part 4 Figure 4C-8. Warrant 4, Pedestrian Peak Hour (70% Factor)



93
pedestrians
per hour

*Note: 93 pph applies as the lower threshold volume.

At most intersections, installing signals is not an option.

HAWKs

- Hybrid Activated crossWalk beacon
- MUTCD warrants: 20 pedestrians / hour

Two-thirds of MARTA bus stops have fewer than 20 riders per day.



At many of these stops, traffic volume and speed make it impossible for pedestrians to find safe gaps in traffic.



Safe Routes to Transit Initiative

Safe Routes to Transit Task Force



2010 Roswell Road field trip

Buford Highway



Pedestrian Road Safety Audits

Ponce de Leon



S. Cobb Drive



FHWA considers median refuge islands a top safety countermeasure.

Proven Safety Countermeasures

Medians and Pedestrian Crossing Islands in Urban and Suburban Areas



U.S. Department of Transportation
Federal Highway Administration



FHWA-SA-12-011

Download the Printable Version [[PDF](#), 312 KB]
You may need the [Adobe Reader](#) to view the PDFs on this page.



A *median* is an area between opposing lanes of traffic, excluding turn lanes. Medians in urban and suburban areas can either be open (pavement markings only) or they can be channelized (raised medians or islands) to separate various road users.

Office of Safety Proven Safety Countermeasures

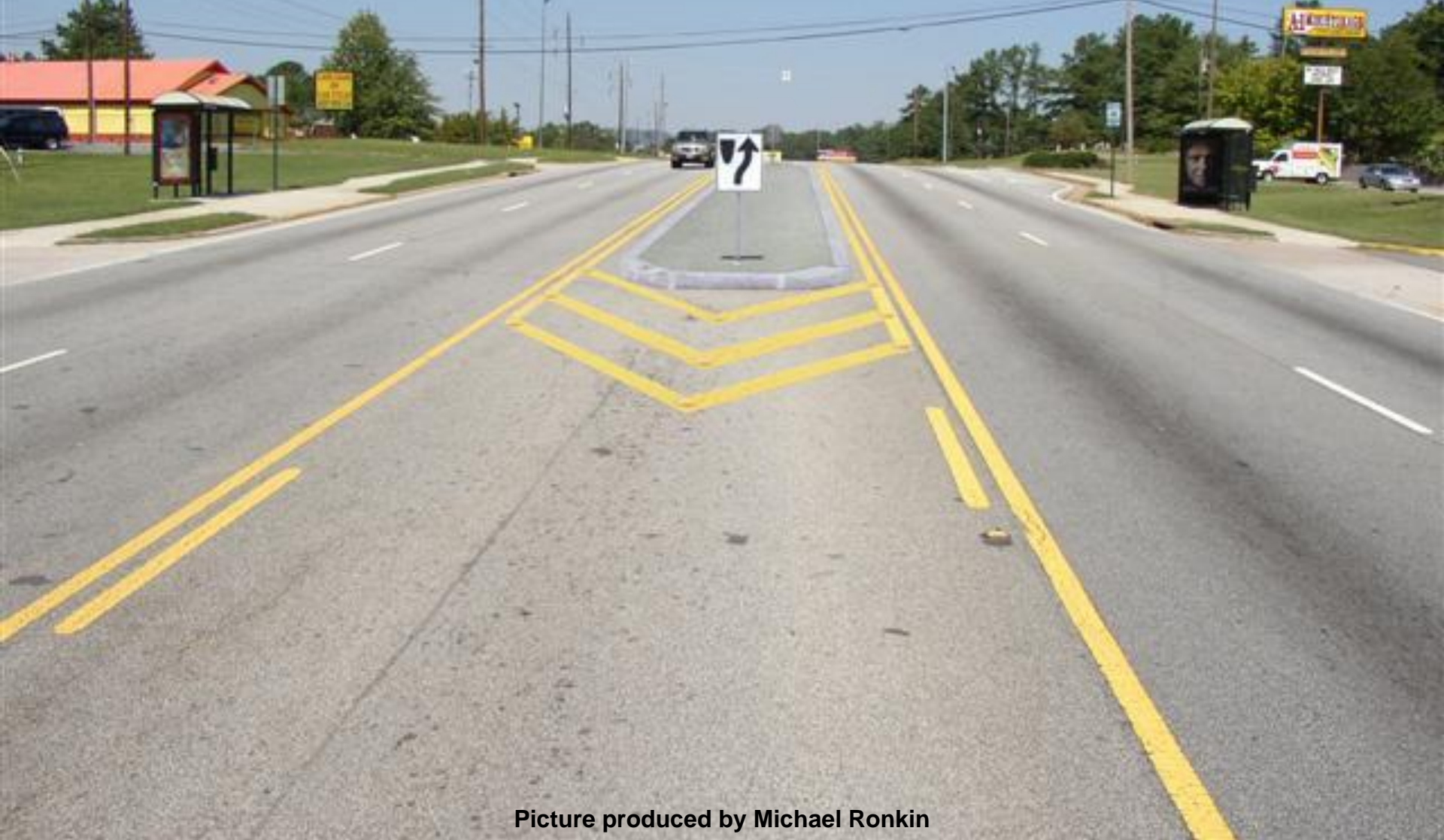


These nine countermeasures address crashes that occur in the focus areas of intersections, pedestrians, and roadway departure.



Break up into two easier crossings of one-way streets.

**Median refuge islands reduce crashes
by 39% at areas without crosswalks**





**“The median island is the #1
safety improvement . . . for crossing a street.”**

Michael Ronkin, Designing Streets for People



People figure out how to cross.



In most locations, crossing outside of crosswalks is legal, as long as people yield to motorists.

If a refuge island isn't enough, engineers can add more devices later.

# of Lanes		2	3	4	5	6	7
Enhanced	Crosswalk	✓	✓	✓	✓		
	Traffic Calming	✓	✓		✓		
	In-Street Sign	✓	✓	✓	✓		
	Yellow-Green Signs	✓	✓		✓		
	2-sided Signs	✓	✓		✓		
Active	Crossing Flags	✓	✓	✓	✓		
	2-Beacon RRFB	✓	✓				
	4-Beacon RRFB	✓	✓	✓	✓		
	Flashing Beacons	✓	✓	✓	✓	✓	✓
	Embedded Lights	✓	✓	✓	✓	✓	✓
Red	HAWK	✓	✓	✓	✓	✓	✓
	Mid-Block Signal	✓	✓	✓	✓	✓	✓
	Signal	✓	✓	✓	✓	✓	✓

Speed Limit (mph)		30	35	40	45	50	55
Enhanced	Crosswalk	Ok	?	?	No	No	No
	Traffic Calming	Ok	Ok	?	?	No	No
	In-Street Sign	Ok	Ok	?	No	No	No
	Yellow-Green Signs	Ok	Ok	?	No	No	No
	2-sided Signs	Ok	Ok	?	No	No	No
Active	Crossing Flags	Ok	Ok	?	?	?	?
	2-Beacon RRFB	Ok	Ok	Ok	?	?	?
	4-Beacon RRFB	Ok	Ok	Ok	?	?	?
	Flashing Beacons	Ok	Ok	Ok	?	?	?
	Embedded Lights	Ok	Ok	Ok	?	?	?
Red	HAWK	Ok	Ok	Ok	Ok	Ok	Ok
	Mid-Block Signal	Ok	Ok	Ok	Ok	Ok	Ok
	Signal	Ok	Ok	Ok	Ok	Ok	Ok

Vehicle Traffic		Light	Medium	Heavy
Enhanced	Crosswalk	✓	✓	✓
	Traffic Calming	✓	✓	✓
	In-Street Sign	✓	✓	✓
	Yellow-Green Signs	✓	✓	
	2-sided Signs	✓	✓	
Active	Crossing Flags	✓	✓	✓
	2-Beacon RRFB	✓	✓	✓
	4-Beacon RRFB	✓	✓	✓
	Flashing Beacons	✓	✓	
	Embedded Lights	✓		
Red	HAWK		✓	✓
	Mid-Block Signal		✓	✓
	Signal		✓	✓

Pedestrian Traffic		Light	Middle	Heavy
Enhanced	Crosswalk	✓	✓	
	Traffic Calming	✓	✓	✓
	In-Street Sign	✓	✓	
	Yellow-Green Signs	✓		
	2-sided Signs	✓	✓	
Active	Crossing Flags	✓	✓	
	2-Beacon RRFB	✓		
	4-Beacon RRFB	✓		
	Flashing Beacons	✓	✓	
	Embedded Lights	✓	✓	
Red	HAWK		✓	✓
	Mid-Block Signal			✓
	Signal			✓

**Reduce costs.
Serve seniors.
Save lives.**

Make refuge islands a state priority.



**What will you do to enable the
Department's engineers to retrofit
existing roads with median refuge islands?**



peds.org